

REMARKS

Applicant has amended claim 15. This amendment has been made to place the claim in better form for examination and to further obviate the 35 U.S.C. §§ 102(b), 103(a) and 112 rejections as set forth in the Office Action dated August 30, 2007. It is believed that the amendment does not constitute new matter. It is submitted that this amendment obviates the rejections. Withdrawal of these rejections is respectfully requested.

Applicant's Attorney thanks the Examiner for the telephone conversation on October 2, 2007 concerning the allowance of claim 15. Applicant's attorney discussed that the invention described in claim 15 has been done in additional crops. In addition, it was discussed that method claims were restricted away from the plant claim and therefore could not be considered at this time.

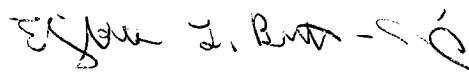
The Examiner has rejected claim 15 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Specifically the claim is broadly drawn to any cytoplasmic male sterile plant made by suppressing the expression of an MSH1-homologous gene in the plant. Applicant notes that the Examiner may have inadvertently referred to Example 4 in the rejection and perhaps meant Example 3, since there is no Example 4 in the Specification. Applicant has amended claim 15. The Examiner has stated that the Specification fails to teach constructs that can be used to suppress the expression of an MSH1-homologous gene in various crop plants. Applicant draws the Examiner's attention to paragraph [00107] which states that antisense constructs used to reduce or suppress MSH1 are based on an MSH1 cDNA or gene sequence (lines 2-4) that is at least 30 nucleotides in length and preferably greater than 100 nucleotides in length (lines 10-14). Therefore the specification does teach constructs that can be used to suppress the expression of an MSH1-homologous gene in crop plants such as wheat, rice, sorghum, tomato, potato and soybean. In addition, Applicant points out paragraph [00111] which discusses RNA interference as a technique for gene suppression that is well known in the art. Also, Figure 3 in the Specification identifies soybean, tomato, rice and common bean MSH1 amino acid

consensus sequences. In regards to Sandhu et al (2007, PNAS USA 104:1766-1770), there appears to be a misunderstanding about Table 1 and crossing. The Applicant would like to clarify that the statement found in the previous response filed June 14, 2007 ("...waits two generations of selfing..."), did not state that two generations of crossing (selfing) are required but that two generations of crossing was done for added confirmation of male sterility (as stated in the previous response filed June 14, 2007). The Applicant maintains that there is no requirement for any crossing and maintains that the crossing information mentioned in the Sandhu reference is not necessary and was done only to confirm (not produce) that the male sterility described in the Sandhu paper is truly cytoplasmic and is caused by the transgene. Therefore, there is no requirement for a crossing step for the male sterility to occur. Applicant maintains that undue experimentation would not be required by one skilled in the art to develop and evaluate a cytoplasmic male sterile plant made by suppressing the expression of an MSH1-homologous gene in the plant because suppression of gene expression is well known to those of ordinary skill in the art. Withdrawal of this rejection is respectfully requested.

The Examiner has rejected claim 15 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Applicant has amended claim 15. Applicant draws the Examiner's attention to paragraph [0018], lines 12-15, of the Specification where in one embodiment of the invention "plant" is selected from the group consisting of maize, wheat, rice, sorghum, tomato or potato...". In addition, the Applicant draws the Examiner's attention to paragraph [0093] at the top of page 35 of the Specification, where numerous plants (such as soybean and millet) are listed as plants that can be transformed. In addition, Figure 3 identifies soybean, tomato, rice and common bean MSH1 amino acid consensus sequences. Applicant also notes that in paragraph [00122], last sentence "A preferred inhibitory compound is an RNA molecule having RNAi activity". Therefore, a compound is described in the Specification that can function to suppress the expression of an MSH1-homologous gene. Withdrawal of this rejection is respectfully requested.

The Examiner has rejected claim 15 under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Fauron et al (2002, US Patent 6,346,612). Applicant has amended claim 15. The Examiner has specifically pointed out Figure 1 of the Fauron et al reference. The Applicant would like to point out that Figure 1 found in the Fauron et al reference only teaches the relative location of primers employed for PCR identification of 4 maize cytotypes and does not teach cytoplasmically male sterile maize plants specifically. In addition, Fauron et al claims sequence specific maize primers that allow PCR reactions to identify and measure each unique specific sequence. Fauron et al uses the primers for identification purposes and does not claim mutant plants that are cytoplasmically male sterile as the present invention does. Therefore, claim 15 is not anticipated nor is it obvious in view of Fauron et al. Withdrawal of this rejection is respectfully requested.

In view of the above amendment and remarks, it is submitted that the claim satisfies the provisions of 35 U.S.C. §§ 102(b), 103(a) and 112. Reconsideration of this application and an early notice of allowance are respectfully requested.

SIGNATURE OF APPLICANT, ATTORNEY OR AGENT REQUIRED					
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